

# Re-covering of Existing Roofs

## The Building Regulation 2010

New roof coverings may impose substantially higher loads on the roof structure compared to the original ones. Occasionally the new material may be substantially lighter than the original material. In both cases a Building Regulation application is required to be deposited with the Building Control Section.

## The Requirements

### Structure (Part A1)

When the roof covering imposes higher loads the roof structure may require additional strengthening work to be carried out and could require a structural appraisal by a qualified engineer to ensure it is capable of sustaining the increased load.

When the roof covering imposes lighter loads the roof structure is to be checked to see if it is capable of preventing uplift. If not, provision of restraining straps, additional ties and fixings to the wall may be required.

In older premises, typically terrace type properties, it is not unusual for the roof to be inadequately braced to limit the effects of roof spread. The lack of triangulation to a roof can usually be easily identified by the construction of the roof not forming a typical triangle but instead forming a shape similar to that shown in the adjacent diagram 1.

Where a roof is identified as having inadequate or no measures for the limiting of roof spread, you will be required to make provisions to remediate this. This is usually

achieved with the addition of metal tie bars that are fixed over the front and rear wall plates linking them together (indicated by the bold line in diag.1)

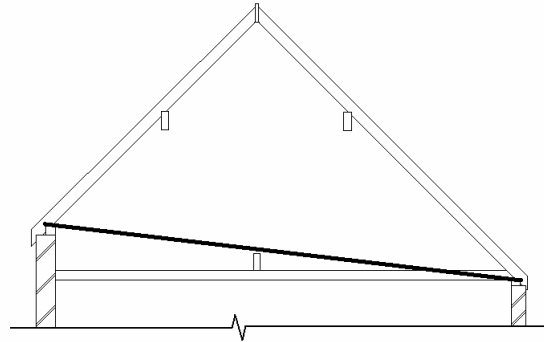


diagram 1. (Roof Section)

## Weights of Roof Coverings

- |    |   |                        |
|----|---|------------------------|
| a. | Coated steel panels                     | 8kg/m <sup>2</sup>     |
| b. | Asbestos cement diamond slates          | 14kg/m <sup>2</sup>    |
| c. | Interlocking reconstituted slates       | 17-25kg/m <sup>2</sup> |
| d. | Cement fibre slates                     | 18-22kg/m <sup>2</sup> |
| e. | Natural slates                          | 31-41kg/m <sup>2</sup> |
| f. | Lightweight concrete interlocking tiles | 28-31kg/m <sup>2</sup> |
| g. | Clay pantiles                           | 44-48kg/m <sup>2</sup> |
| h. | Concrete interlocking tiles             | 47-58kg/m <sup>2</sup> |

## Typical Spans of Roof Timbers (C16 Grade Timber)

For Pitches Over 30°	Slates	Concrete Tiles
<b>Rafters</b>		
50mm x 75mm at 400mm centres	2.45m	2.21m
50mm x 100mm at 400mm centres	2.55m	2.41m
<b>Purlins</b>		
50mm x 75mm at 400mm centres	3.09m	2.92m
50 x 75 at 400mm centres	2.92m	2.76m

## Roof Insulation (Part L1)

When replacing a roof covering of a property the roof insulation is required to be increased to the current standard for new dwellings. This can usually be achieved by a combined thickness of 270mm of fibre glass quilt, this is usually laid in two layers, one layer of 100mm and a second layer of 170mm laid at right angles to the base layer.

### **Resistance to Moisture (Part C2)**

As well as the obvious purpose of a roof to prevent the ingress of moisture from the weather, there is also a requirement to prevent the build up of condensation in a roof space. Adequate permanent ventilation will be required to be provided to the roof void either by the use of an accredited breathable roofing felt or permanent open ventilation via a 10mm continuous strip at the eaves or other comparable means. Where a roof is insulated at the pitch line the rate of ventilation must be increased to a 25mm continuous strip or equivalent at eaves and a 5mm continuous strip or equivalent at the ridge.

Where other means of ventilation such as tile vents are used, these must be spaced at suitable centres so that the rate of ventilation is at least equivalent to the following;

- Where insulated at ceiling level,  
Eaves – 10,000mm<sup>2</sup>/m run.
- Where insulated at the pitch of the roof,  
Eaves – 25,000mm<sup>2</sup>/m run.  
Ridge – 5,000mm<sup>2</sup>/m run.

### **Planning Permission**

In addition to Building Regulations Approval you may also require Planning Permission for the new roof covering. For further advice before please contact the Councils Planning Section.

Telephone:  
Leicester (0116) 257 2636

Email:  
planning@oadby-wigston.gov.uk

### **PLEASE NOTE**

**Building work may require other permissions, including Planning Permission.**

#### **For further information:**

Web:  
[www.oadby-wigston.gov.uk](http://www.oadby-wigston.gov.uk)

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(0116) 2572657

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# ***Borough of Oadby & Wigston***



## ***Building Control***

Building Regulations 2010

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